networks.

What we are opposed to is any requirement that would require these collocation arrangements for the purposes of connecting two pieces of the Bell network that are already in the central office.

I would like to start off talking about some of the big picture impacts that we see from such a requirement that collocation be used to basically recombine two elements both in the same central office.

From a practical perspective, we believe that this would eliminate the prospects of providing the real broad based local competition that a lot of people have been concerned about on the residential and small business side, and at the same time we believe that it would needlessly exhaust already scarce collocation space that we feel is necessary to promote facilities based competition.

Since Mr. Unruh focused on the legal issues, I would like to focus on some of the technical issues. Basically the collocation requirement cannot satisfy the statute's non-discrimination requirement and does not provide competitors with a meaningful opportunity to compete.

Combining elements through collocation would provide inferior service to competitors as compared to what the ILECs provide to themselves. This discrimination occurs

in three major areas: degraded customer service, limitations on access to facilities, which Mr. Falcone termed the gating factor, and additional cost.

I would like to just kind of walk through how this would impact a customer who wishes to take service from competitors using recombined unbundled elements. First, the customer's service will be physically taken out of service during a physical cut over where technicians would actually remove the customer's line and cross connect it to the collocator's facilities. What this does is add additional points of failure to the customer's line that did not exist when he had the ILEC's service.

The length of the customer's line has been increased, which can add additional loss and degradation of service to the line, and, fourth, the customer who may have been served via a fiber optic distribution network and state-of-the-art digital remote carrier system, now will most likely have to be served over an old analog copper loop as integrated digital loop carrier systems currently cannot be physically separated from the switches that they are integrated with. Clearly, any viable alternative that does not place customers in such a precarious position should be strongly considered.

The next point I would like to make, which Mr. Salemme noted earlier, is that collocation space is a very

scarce resource. Most ILECs have indicated that many of their key central offices are already out of available physical collocation space. Requiring collocation for the sole purposes of combining elements that are already within the central office will limit the available space for facilities based carriers such as WorldCom, which can utilize unbundled loops or other network elements.

Even with the current demand for collocation, ILECs generally take six to nine months to install a collocation cage, and these intervals may have been improved recently, but imagine if the demand for collocation space were increased tenfold to meet new requirements of collocating to combine elements. Competition would only be available to those lucky few customers who happen to be served out of a central office where a competitor has already collocated. The rest of the nation would have to wait until the massive backlog of collocation orders was cleared. Clearly, we do not believe this is an approach that would bring broad competition quickly.

Regarding cost, anyone who has worked with the issues of collocation tariffs as I have over the last five years knows that collocation is very costly. There is costs of cage construction, floor space, power cabling, equipment, maintenance, training. The list goes on.

To sum up, collocation requirements will impact

both the availability of broad based competition and will needlessly waste valuable collocation resources. Requiring competitors to perform unnecessary functions that compromise service quality cannot be supported by anyone favoring competition in the local telecommunications marketplace.

MS. MATTEY: Thank you.

I have several questions. I hardly know where to begin, but I am going to start off with a question which John Lenahan touched upon, so this mainly is directed to the other panelists and in particular to Mr. Poole.

Assume for the moment that the Commission concluded that collocation was the only method for combining elements required by the Act. What criteria should the Commission use in evaluating whether that method meets the statutory non-discrimination requirement?

MR. POOLE: Okay. To begin with, I am a technician, and I am not really familiar with the statutory requirements, but --

MS. MATTEY: Okay.

MR. POOLE: -- let me address some of the collocations that I think would be in the part of --

MS. MATTEY: Well, the people over here have talked about, you know, reasons why they feel collocation is inferior.

MR. POOLE: Yes.

MS. MATTEY: We have to sort of look at if one were to assume that collocation is the only thing required, how should we judge whether it is equivalent?

MR. POOLE: Well, I think one of the standards you use is the fact that it is certainly in effect today. As Mr. Lenahan pointed out and as I mentioned, the RBOCs today have a substantial amount of collocations in place.

I might mention that with respect to the collocation areas that Mr. Ball brought up, and also the NEXTLINK panelist indicated that in California they had gotten a letter that said there was no space, and then they got a follow up letter that said there was. I think that that is a direct result of SBC trying to be responsive to what our requirements are under law.

What we did in that case is we went to the central offices. We looked at all the space that we could take out that was administrative space. We moved that administrative space to perhaps another building. We did this so that we could make more collocation space available.

I just want to bring that I guess to the Commission's attention that there has been a lot of comments about us stifling competition. In fact, you know, we want 271. We want to do what we have to do to get 271, so we are out there trying to do this.

MS. MATTEY: Okay. Perhaps you folks over here

would like to address the question.

If we were to conclude that collocation is the only method required, how should we judge whether it is non-discriminatory?

MR. UNRUH: You are talking now collocation for combining UNEs?

MS. MATTEY: Yes.

MR. UNRUH: It is hard for me to answer that because I cannot see how collocation for combining UNEs could ever be non-discriminatory, given the problems that exist with it, given the cost and inefficiencies that it imposes upon the CLECs, given the fact that it limits our competitive opportunities as we have heard this morning, given the fact that we cannot get access via collocation to a certain class of customers that are served by integrated digital loop carrier technology.

All of those factors, and I am sure others, are just such that from the standpoint of looking at collocation for combining UNEs, I do not see how that could ever be determined to be non-discriminatory.

MS. MATTEY: Okay. Mr. Ball, do you have any other thoughts?

MR. BALL: Yes. I think what is kind of evident is that the incumbent LECs have established a pretty high degree of mechanization into their networks, and also with

things like remote switches and integrated digital loop carriers they have fiber optic networks that run out to remote locations.

If you were going to require collocation and then you said you wanted to make it non-discriminatory, the only way you could do that is if you required the incumbent LECs to undo all the mechanisms they have in their networks and require them to collocate through the same process. That is the only way you could really do it if you were requiring collocation.

MS. MATTEY: John, do you have any follow up?

MR. LENAHAN: Yes, I have a little follow up when we say what non-discriminatory access is not, and then let me give you my opinion on what it is, okay?

Non-discriminatory access under (c)(3) and (c)(6) is not the same access that the incumbent provides to itself for two reasons. The incumbent provides access to its network as a bundled preassembled combination. That is how it accesses the network. Once it combines the network, that is how it accesses the network. In contrast, a requesting carrier who is accessing unbundled network elements does not get bundled access. It gets unbundled access.

Secondly, collocation is not the only place or only method of obtaining access to a network element. That is not our position. It is the only method if the access

takes place in the incumbent's central office. If it takes place in the incumbent's central office, as long as there is a property law and the Fifth Amendment, there are certain rights that the property owner has. Congress has balanced those rights and has said that if physical access takes place in your property, you are permitted to put that in a separate collocation space. That is the second difference.

The incumbent, as the owner of the office, has direct access to every nook and cranny in the office. The requesting carrier, who has a right to enter, has a restricted right which is limited to collocation. Now, that is what non-discriminatory access is not.

What is it? What it is is making sure that we can provide to that collocation space, assuming access is requested in the incumbent's office, that we can provide in a timely manner and in a manner which permits the requesting carrier to do the combination, the unbundled network elements that they request.

The concerns about well, there are additional connections that are going to be required or it is going to be a couple hundred extra feet of jumper or tie cable and, therefore, that is not an acceptable means to provide this, that is just wrong.

I mean, a central office has thousands and thousands and thousands of connections. Two or three extra

connections does not impact the network quality of the public switch network, and a typical loop is a mile or two. Some loops are five miles long. A couple hundred feet of a tie cable does not affect the call quality on that loop.

In our demonstration that we did, we did call testing and the typical network quality testing on unbundled network elements that were combined in a central office collocation space, and then we completed typical call flows and measured was there any dial tone, any post dial tone delay. Is there any loss of call quality? Our results concluded that there were none, that this was a technically feasible way of doing this.

That is the meaning of non-discriminatory access. Do you provide the element in a way that permits the new carrier to use it and provide service?

MS. MATTEY: I have a follow up question, and maybe I am missing something, but I think I heard you say that if we provide access on our own premises, collocation is the only way, and implicit in the way you phrased that is the notion that you could provide access not on your property.

MR. LENAHAN: Yes.

MS. MATTEY: What are you talking about there?

MR. LENAHAN: Well, the Commission, in the first report and Order, struggled with the apparent conflict

between (c)(6) and (c)(3) in terms of the methods of access.

Interconnection is the more extended discussion in the first report and Order on this. The Commission concluded that interconnection could take place at the incumbent's premise, at the requesting carrier's premise or at someplace in between, a so-called meet point interconnection arrangement.

The Commission also found that in the context of access to network elements a meet point arrangement did not really make a lot of sense, but I do not think the Commission concluded one way or another.

As a matter of fact, in the early days back in 1995 when we were providing unbundled network elements to City Signal, which is now WorldCom through a series of acquisitions, we provided the loop outside the central office through a tie pair and so there was access. At that point, City Signal had direct access to the loop outside the central office, so there are other methods of obtaining access. I do not think they are probably very practical if you are talking about two network elements in the central office.

MS. MATTEY: Okay. I have another question that I would like to direct to Mr. Ball and Mr. Unruh.

You know, there has been discussion about the use of collocation introduces multiple points of failure. How

does that differ from the points of failure when a new entrant connects an unbundled to its own facilities?

MR. UNRUH: You are asking a lawyer that?

MS. MATTEY: Okay. He is the practical technical person.

MR. POOLE: The answer is it does not.

MR. BALL: Well, I think you have to start out looking at the initial configuration on the LEC network, which is a loop coming in on one side of the LEC's main distribution frame, being cross connected and then going from the other side of the main distribution to the switch. Looking at that configuration, you know, the points of failure are at the frame, at the switch and anywhere out in the field.

When you establish a collocation arrangement, you now run wires. Instead of going from the main distribution to the switch, you run wires from the frame to another frame within the central office, and then from that frame you run the wires into the collocator's cage.

Right there, even using unbundled loops as a facilities based carrier, there is this extra frame in there and an extra point of failure, more wires running throughout the building, you know, that a rat could gnaw through, for example; not to disparage your central offices. Even on an unbundled facilities based carrier's way of providing

service, there is more points of failure.

Now we take the next step of saying okay, now we are taking another wire from that central office and going back to another frame and then going back to the switch, so now you have four extra places on that frame plus all this extra wiring running throughout the building, so using your own facilities is not as ideal as the LEC's own network, but the worst of all the scenarios I think is the recombination of all the elements.

MS. MATTEY: Okay. Do you wish to respond?

MR. POOLE: Yes, just one other point. With respect to the additional point cross connects or the jumpers or interjecting additional points of failure in the network, you know, in many cases the incumbent LECs themselves take that jumper that this gentleman was talking about that is going between to the loop and the switch port.

For purposes of improving transmission on the individual loop, they will break that cross connect, take it over to another IDF frame or some other type of device, cross connect it there for purposes of obtaining an amplifier or something of that nature to improve the quality on the loop, bring it back and recross connect it to the main frame, to the switchboard.

The point of it is that these connections are hard wired connections that are stamped down. As a matter of

fact, this is an example of where those connections would be made. You can tell by looking at this that those connections are not necessarily long, so you are talking about a cross connection which is inches long.

The point of it is is that those hard wire connections are in place. They are not subject to somebody taking them off unless it is obviously human error. There is no more subject of failure than the cable laying on the floor right there. It is in place. It is electrically connected. I just think that interjecting these additional cross connects is not necessarily a point of failure in the network.

I might add that some of these cross connects will be out of the control, by the way, of the RBOC. They will be in the CLEC's base where they are subject to failure as well.

MS. MATTEY: Okay.

MR. UNRUH: Can I just respond briefly?

MS. MATTEY: Sure.

MR. UNRUH: I do not doubt that there are occasions, as Mr. Poole described, where an ILEC may make additional connections to improve quality or enhance quality or attach things to an amplifier, but the point here is that is a decision the ILEC is making for its own to improve its own network.

In our situation, if we are required to collocate to combine UNEs we do not have the choice. The connections, the multiple connections, will be required of us, and they will not be at our choice to improve our network.

MR. BALL: I think I would like to add that if Southwest Bell does decide that they want to connect their loops to other equipment, they would probably place the equipment in a manner so it minimizes the potential for something to happen, so they are going to put it in a secure place, and it is going to be very close ideally to the frame.

I will give you an example. In Baltimore, downtown Baltimore, we have a virtual collocation arrangement that we use to access unbundled loops that is five floors away from where the main distribution frame is, so it is pretty clear that we did not have an option of where we placed the equipment, and we have five floors of cabling that is a potential additional point of failure that the Bell Atlantic does not have when they provide the service.

MS. MATTEY: Okay. I would like to direct the next question to our two representatives from the BOCs.

Mr. Unruh made the point that having a CLEC bring any equipment to the collocation space to effectuate the combination of network elements is directly inconsistent

with the language in the Eight Circuit opinion, and I was wondering what your response would be to that argument?

MR. LENAHAN: I disagree that it is inconsistent with the Eighth Circuit's holding. The Eighth Circuit in this area ruled on two issues; one, who does the combining, and, secondly, can the requesting carrier obtain all of the network elements needed to provide a service.

The two rulings were sort of linked, in my mind, in the Court's opinion. The Court found that the statute means what it says, that the requesting carrier receives the unbundled network element in an unbundled way, and they do the combining.

When the Court got around to the second question of whether or not the requesting carrier could obtain all of the network elements needed to provide a service, network elements, some of the petitioners before the Eighth Circuit were arguing no, you need to bring, and I think the phrase that we were using was you need to bring something to the table. You need to have a loop, or you need to have a switch, or you need to have interoffice transport. You need to have a network facility in order to have the privilege of obtaining access to an unbundled network element.

The Court rejected that. The Court said I do not see that anywhere in (c)(3). Now, we are appealing that to the Supreme Court, and as many of these issues, like Mr.

Townsend mentioned this morning, need to be decided by the United States Supreme Court, but the Eighth Circuit said no, you, the requesting carrier, are entitled to obtain all of the network elements that enable you to provide a service.

The equipment that is needed to access a network element is something like this. It is a cross connect. It is not a network element. It is equipment that the requesting carrier owns, and it is in no way inconsistent with the Court's conclusion that you can obtain all of the network elements from the ILEC that you need to provide a service.

That is true. You can. If you need to combine the network elements and you use cross connect equipment to do that, that is not inconsistent with what people call the all elements rule.

MS. MATTEY: Okay. Do you have --

MR. POOLE: Well --

MS. MATTEY: I am sorry.

MR. POOLE: I thought you were going to take the --

MS. MATTEY: Sure. I apologize.

MR. POOLE: My only comment would be that the CLECs do have an option. They do not have to have this point of termination or this access point in their physical collocator cage or area.

I would just mention or introduce my topic that we do have alternatives to that, and it does not necessarily have to be in their collocated area.

MS. MATTEY: Is there any response on this side, or shall we move on to another question?

MR. UNRUH: I will respond briefly.

MS. MATTEY: Okay. Okay.

MR. UNRUH: Mr. Lenahan is right. The argument was made by the ILECs that the CLECs must have some network equipment before they be allowed to buy UNEs. They lost on that argument.

I think the Eighth Circuit was very, very clear in what it held in terms of the CLECs' ability to combine UNEs and provide service or combined UNEs without owning or controlling any portion of a telecommunications network.

He said the cross connect is not a network element. I believe other ILECs have taken contrary positions. In the state arbitrations, I believe SBC has argued and prevailed on the notion that a cross connect is a network element. Clearly, it is.

The distribution frames that would be used to combine these elements would be they are facilities over which telecommunication services are provided. The ILECs use the distribution frames themselves to provide a telecommunications service, so clearly they fit within what

the Eighth Circuit said we do not have to have in order to purchase and combine UNEs.

MS. MATTEY: Okay. My next question is I know Mr. Ball indicated that the BOCs are running out of space for physical collocation, and I know that has been, you know, raised to us as a significant issue.

I would like the two representatives from the BOCs to tell us what they are doing to alleviate space limitations.

MR. LENAHAN: I would agree that in certain downtown central offices space is at a premium. It has not been an acute problem for Ameritech yet. We have had to deny physical collocation in some areas that we provided virtual collocation, so the need of the requesting carrier has been met in all cases that I am aware of.

Some things we are doing to conserve space is we are willing to entertain a request for less than 100 square feet, which is the current configuration right now. We do not require that the requesting carrier have an enclosure or a cage.

That minimizes the space requirement, and we are taking into account, now that we have this legal obligation, when we do space planning ways of maximizing the use of our central office space.

MS. MATTEY: Okay.

MR. POOLE: I echo his comments. The one I might add to that is that SBC has committed in the situation where a CLEC has a collocated area, they have the right to sublease part of that collocated area to other CLECs.

I would echo his sentiment that whenever a building is limited with respect to floor space, Southwestern Bell itself will have a problem adding new equipment. They would have to do a building addition. When that building addition is made, they will take into consideration the CLECs' requirements.

MS. MATTEY: Okay. I have one last question before I am going to turn it over to the audience, and I am addressing this to all the panelists.

The question is what effect would the use of collocation for combining network elements have on service quality for end users that are served by integrated digital loop carriers?

MR. POOLE: I guess I will go there first on that one. SBC has committed that where a local loop is on IDLC that we will take that and break it out on copper and provide it as an unbundled loop.

MS. MATTEY: Do you have any comments on that?

MR. LENAHAN: We have a similar position, and the fact is that the existing integrated digital loop carrier cannot be unbundled. It is not really a problem with

collocation. It is an issue with the loop itself.

When we deploy our future IDL capability, the next generation of equipment permits unbundling so that should alleviate that problem. Until then, it is just a fact of life. When we realized back in 1995 when we started providing unbundled loops, we recognized the technical problem associated with IDLC, and we deliberately changed our network planning to minimize our deployment of that functionality.

MS. MATTEY: Do you folks have any comments before I turn it over to the audience?

MR. BALL: Yes. I think this is an issue both when there is integrated digital loop carrier systems and remote switching modules that have intelligence out in the field.

Yes. I agree that the only way to really do that right now is to take the customer off this fiber optic based network and put him on a copper loop. I think it is clear that old analog copper loops are not as good quality as the loops served over a fiber optic system. It is higher maintenance. When it rains you get static. You know, there are all kinds of things that can happen with a copper loop, which is why they are replacing them with fiber optic systems.

I think to the extent that it is acknowledged that

you have to take them off fiber and put them on copper, that degrades the service.

MR. UNRUH: It seems like you also build in delay. There is an assumption that there is going to be a spare copper pare to serve the client, to serve the customer, and it is going to be another point of delay in getting the customer converted if that customer has to be taken off of the IDL technology and switched to a spare copper paid.

MS. MATTEY: Okay. I would like to open it up now to questions from the audience. I see a hand in the far back.

MR. BENSOVENGLE: My name is Mike Bensovengle from Southern New England Telephone Company.

Can either Mr. Ball or Mr. Unruh square their concerns with regard to network reliability or points of failure when it is not unusual for ILECs to serve areas remotely from a switch perspective to their loops, or at least in one case a CLEC operating in Connecticut connects its switch to S&A T-loops from two states away?

MR. BALL: I do not think I fully understood the question. Are you saying that some of the CLECs' networks may use remote switching that may have the customer's loop being farther away than the ILECs' switches? I mean, I think you are talking about our network.

MR. BENSOVENGLE: Yes. Yes. The issue is really

as I sat here and listened to you folks talk about rats gnawing on cables and things of this nature and what have you, one would expect that with the distance between Connecticut and where other switches are located that they are susceptible to other conditions, whether it be electronic failures and/or physical failures due to dig ups, things of this nature.

My question is when you think about points of failure and network reliability, it would seem reasonable that the more exposure you have in that area the greater points of failure. When you talk about collocation within a CO, you are really talking, you know, maybe hundreds of feet versus, you know, hundreds of miles.

MR. BALL: Well, I think I agree that the farther your switches from your customer the more points of failure there are. I do not disagree with you.

You know, I think if a CLEC puts a switch two states away from their customer they are introducing a lot of points of failure, and that is why that is not going to happen in the future.

MS. MATTEY: Any other questions from the audience? I see a hand over there and one over there. Let's go over here first.

MR. QUINN: I would like to ask a question of Mr. Lenahan. I am Bob Quinn from AT&T, and it has been a while

since I have practiced in your territory.

I was familiar with your virtual collocation offering, and I am just curious how recombinations of elements are done in COs where you have exhausted physical space and now you are providing virtual collocation?

MR. LENAHAN: Well, as you know, under virtual collocation the equipment is owned by the ILEC and leased back to us. The work that is provided for the requesting carrier is provided on a time and material basis pursuant to the requesting carrier's instructions.

MR. QUINN: --

MR. LENAHAN: Under a virtual collocation arrangement, yes. That is the way virtual collocation works.

MR. QUINN: Do you offer to do the combining of elements in virtual collocation settings when you are in the territory?

MR. LENAHAN: That is my understanding of our offering. I mean, we do what we are asked to do. I believe AT&T has some virtual collocation arrangements with us. I guess the --

MR. UNRUH: Is that on the record that you --

MR. LENAHAN: Absolutely. Absolutely, Mr. Unruh.

MR. UNRUH: I want to make sure I have you.

MR. LENAHAN: Subject to the law.

MR. GOLDSTEIN: I guess the bottom question that you may have been getting at was if the BOC was doing the combining, how is that consistent with the Eighth Circuit's opinion, which you indicated said that the CLEC should do the combining, and is that any different than a BOC doing the combining for a separate charge?

MR. LENAHAN: Well, I mean the difference is the difference between virtual and physical collocation, and virtual collocation is titled virtual I think for a meaning, a reason.

It is a legal arrangement where the equipment being combined is not technically the requesting carrier's equipment, and so the BOC is technically combining its own equipment, which is clearly not inconsistent with (c)(3).

MR. POOLE: Can I address that? The purpose for collocation is obviously to have access to unbundled elements or loops or whatever in the ILEC environment.

What virtual collocation does is it takes the place of physical collocation. It gives a path, so to speak, for the ILEC to come into our CO, and rather than going into a collocation CO and having their own transmission equipment or their own equipment in there, what the virtual collocation does is allow them a path through the CO using the incumbent LEC's equipment, but they still have to have some means of combining the loops and the UNEs

and so forth in that environment.

That is why Southwest Bell offers the additional UNE combination arrangements. That virtual collocation will still have to combine the loops and the ports that is in that central office so they can carry it back out to their customers.

MR. LENAHAN: Bob, Dan Culver just mentioned this to me, my right-hand man, Dan. The AT&T contract specifies in your virtual collocation arrangement an escort of an AT&T technician, so in your case you have negotiated for an escort service, and you do not have Ameritech doing the combination.

MR. QUINN: Well, will then our technician be permitted to perform the recombination of elements?

MR. LENAHAN: Yes. That is what an escort service is, yes.

MR. QUINN: --

MR. LENAHAN: Pardon me? In a virtual collocation arrangement, if you want your technician to be escorted and to work on the equipment that is subject to the virtual collocation, that is acceptable.

MR. QUINN: And you will let our technician perform the recombination of elements?

MR. LENAHAN: In the virtual collocation area, yes.